

ABSTRACT

DRUG UTILIZATION PATTERN OF ANTIARRHYTHMIA IN PATIENTS WITH HEART FAILURE

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Heart failure is a clinical syndrome in which the heart is unable to pump blood to meet the body's metabolism. Arrhythmia is commonly occurred in heart failure. Arrhythmia is a heart rhythm disorder characterized by absence of clear P waves on ECG and abnormal heartbeat. This study discussed about amiodarone (rhythm control), digoxin and bisoprolol (rate control) for management therapy of arrhythmia in patient with heart failure. This study aimed to review the use of antiarrhythmia drugs in patients with heart failure in cardiovascular unit of Teaching Hospital Surabaya from January 1 to December 31, 2017. This study was an observational retrospective conducted by examining the drug utilization data from the patient medical record. There were 36 patients diagnosed with heart failure and received amiodarone, digoxin and beta-blocker. The most widely used drug was digoxin (61.1%) and bisoprolol (25%) as rate controlling agent. Amiodarone (13.8%) was used as rhythm controlling agent. The combination found in this study were amiodarone and digoxin (2.7%), amiodarone and bisoprolol (5.5%), digoxin and bisoprolol (11.1%). The dosage of amiodarone, digoxin and bisoprolol were different for each patient and depend on their clinical features. In addition, the route of administration for amiodarone and digoxin were peroral and intravenous injection, which consisted of loading dose and maintenance dose. There were no drug related problems (DRPs) identified. The potential interactions between antiarrhythmia agents and other concomitant drugs were the increase of anticoagulant effect of warfarin, decrease antihypertension effect of bisoprolol and increase of serum digoxin concentration. The use of amiodarone, digoxin and bisoprolol either in single or combination therapy were in accordance with the National guidelines for treatment and therapy for arrhythmia, including appropriate dose, frequency and route of administration.

Keywords : heart failure, antiarrhythmia, drug related problems.